(10)Types of wave front
(11)What are coherent sources?
(12)Temporal coherence

(13)Spatial coherence
(14)Young's double slit experiment
(15)Huygens Principle
(16)Huygens Principle of Secondary Wavelets
(17)Advantages and Disadvantages of Huygens Principle
(18)Temporal and spatial coherence

Reference Books

- **Vibrations and Waves, A.P. French, 1st Edn. 2003, CRC press.**
- **Waves: Berkeley Physics Course, vol. 3, Francis Crawford, 2007, Tata McGraw-Hill.**
- **Fundamentals of Optics, F.A. Jenkins and H.E. White, 1981, McGraw-Hill**
- **Principles of Optics, Max Born and Emil Wolf, 7th Edn. 1999, Pergamon Press.**
- **Optics, Ajoy Ghatak, 2008, Tata McGraw Hill**
- **The Physics of Vibrations and Waves, H.J. Pain, 2013, John Wiley and Sons.**
- **The Physics of Waves and Oscillations, N.K. Bajaj, 1998, Tata McGraw Hill.**
- **Fundamental of Optics, A. Kumar, H.R. Gulati and D.R. Khanna, 2011, R. ChandPublications**
- **Optics, Eugene Hecht, 4thEdn. 2014, Pearson Education.**

Electromagnetic wave nature of light

Newton's corpuscular theory of light

In 1672, Newton's gave the corpuscular hypothesis of light which expresses that light is comprised of little discrete particles called "corpuscles" (little particles) which travel in an orderly fashion with a limited speed.
This hypothesis couldn't make sense of the interference, diffraction, polarization peculiarities which prompts the wave lead to the wave theory of light.